

**METHODS AND APPARATUS FOR IMPLEMENTING
VIRTUALIZATION OF STORAGE WITHIN A STORAGE AREA
NETWORK THROUGH A VIRTUAL ENCLOSURE**

ABSTRACT OF THE DISCLOSURE

Methods and apparatus for implementing storage virtualization on a network device of a storage area network are disclosed. A virtual enclosure is created that has one or more virtual enclosure ports and is adapted for representing one or more virtual storage units. Each of the virtual storage units represents one or more physical storage locations on one or more physical storage units of the storage area network. Each of the virtual enclosure ports of the virtual enclosure is associated with a port of a network device within the storage area network. An address or identifier is then assigned to each of the virtual enclosure ports.